SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF398 (F-23): sc-102215

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Zinc finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. Zinc finger protein 398 (ZNF398), also known as zinc finger DNA-binding protein p52/p71 or ZER6, is a 642 amino acid member of the Krüppel C_2H_2-type zinc finger protein family. Localized to the nucleus, ZNF627 contains nine C_2H_2-type zinc fingers and one KRAB domain through which it is thought to be involved in DNA-binding and transcriptional regulation. Existing as two isoforms produced by alternative splicing, ZNF398 is induced by ERα.

REFERENCES

1. Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
2. Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
3. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
4. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
5. Conroy, A.T., Sharma, M., Holtz, A.E., Wu, C., Sun, Z. and Weigel, R.J. 2002. A novel zinc finger transcription factor with two isoforms that are differentially repressed by estrogen receptor-α. J. Biol. Chem. 277: 9326-9334.
6. Englbrecht, C.C., Schoof, H. and Böhm, S. 2004. Conservation, diversification and expansion of C_2H_2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39-39.

CHROMOSOMAL LOCATION

Genetic locus: ZNF398 (human) mapping to 7q36.1.

SOURCE

ZNF398 (F-23) is a purified rabbit polyclonal antibody raised against ZNF398 of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ZNF398 (F-23) is recommended for detection of ZNF398 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF398 siRNA (h): sc-89890, ZNF398 shRNA Plasmid (h): sc-89890-SH and ZNF398 shRNA (h) Lentiviral Particles: sc-89890-V.

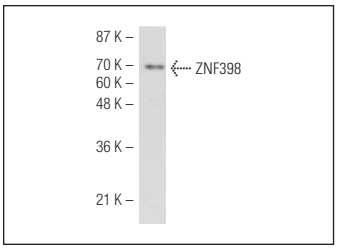
Molecular Weight of ZNF398: 71 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ZNF398 (F-23): sc-102215. Western blot analysis of ZNF398 expression in Hep G2 whole cell lysate.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.